Clean Air Facts

Air Pollution Construction Permit Basics

SBCA-NS1-0803

Do You Need a Construction Permit?

Any business looking to move to Wisconsin or any existing Wisconsin business wishing to expand, must file an application for an air pollution construction permit with the Wisconsin Department of Natural Resources (DNR). The following are activities that would trigger a construction permit:

1. **New Sources:** a facility, process line or portable source that was either constructed or modified after April 1, 1972 or to which a new emission limit applies.
2. **Modification:** a physical change, or change in the method of operation that produces either more air emissions of the same type or "new" air emissions.
3. **Reconstruction:** to remove old -- and substitute new -- components that exceed 50% of the capital cost of building a new source.
4. **Replacement:** to dismantle and substitute a process or facility with similar one.
5. **Relocation:** to remove a process or facility from one location and place it at a different location on-site or a new site.

Some smaller new or expansion projects with air emissions may be exempt from the requirement to apply for a construction permit.

Is My Project Exempt?

There are two possible exemption levels that may allow your project to be exempt from construction permit requirements.

Specific Exemptions:

A new or expansion project will be exempt if each emissions unit being added or modified will be smaller than each of the specific exemption levels as follows:

❑ Painting or coating operations that emit or will emit no more than 1,666 pounds of organic compounds per month, which are measured prior to entering any emission control device.

❑ Graphic arts operations that emit or will emit no more than 1,666 pounds of organic compounds per month, which are measured prior to entering any emission control device.

❑ Motor vehicle refinishing shops that emit or will emit no more than 1,666 pounds of organic compounds per month, which are measured prior to entering any emission control device.

❑ Cold cleaning equipment with a total air to vapor interface of 1.0 square meters or less during operation.

❑ Open top vapor degreasing equipment with a total air to vapor interface of 1.0 square meters or less during operation.

❑ Dry cleaning operations with a total maximum operating capacity for all machines of 75 pounds of clothes per hour.

❑ Gasoline dispensing facilities that dispense gasoline or other petroleum products.

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❑ Grain storage facilities with an average of less than 5500 tons grain received per month.

❑ Grain processing facilities with an average of less than 4500 tons per month.

This is only a partial list of the specific exemption categories. A complete list of specific exemptions can be obtained from your local DNR permit engineer or the Small Business Clean Air Assistance Program (SBCAAP). If you have any emissions units that are not defined by one of the specific emissions categories you cannot be exempt under the specific exemptions. You would then evaluate whether you can meet the general exemptions.

General Exemptions:

A general exemption is based on your facility's Maximum Theoretical Emissions (MTE). This is a calculation of the greatest possible amount of air pollution your business could emit if you operated at maximum production capacity, 24 hours a day, 365 days a year, without any air pollution control devices. Your MTE needs to be less than the air operation program limits for the following different pollutants:

➤ **Volatile Organic Compounds (VOCs), Particulate Matter (PM), Nitrogen Oxides (NOx)**	**5.7 lbs/hour**
➤ **Sulfur Dioxide (SO_2) or Carbon Monoxide (CO)**	**9 lbs/hour**
➤ **A Single Federal Hazardous Air Pollutant***	**10 tons/year**
➤ **Combination of any Federal Hazardous Air Pollutants***	**25 tons/year**
➤ **Any State Hazardous Air Pollutant**	**Greater than ch. NR 445 table value.**

**There are 188 federal hazardous air pollutants as determined by the Environmental Protection Agency (EPA). There are also over 400 state hazardous air pollutants. If you need help in determining whether you have any hazardous air pollutants, look at your material safety data sheets, contact your suppliers or call the SBCAAP. Also, SBCAAP has a fact sheet on the State Hazardous Air Pollutant program that may help.*

If your calculations show that your MTE is less than the above emission rates, your facility will not need to apply for an air operation permit. (You should keep a copy of any of the calculations you do to support your exemption claim.)

Calculation Example:

Here's a general example of how to figure out your MTE for the VOCs in a paint spraying operation:

❶ Find out the **highest VOC content** in the material(s) you use. (VOC lb/gal)

❷ Determine the maximum amount of paint you can use in one hour. (gal/hour)

❸ Calculate how much VOC you would emit if you used this amount of material for 24 hours a day for a year. (24 hours x 365 days = 8,760 hours)

Example:

VOC per gallon: 6.7 lb/gal
Maximum usage of material: 4 gal/hr

6.7 lb/gal x 4 gal/hr = 26.8 lb/hr
26.8 lb/hr x 8760 hr/yr = 234,768 lb/yr
234,768 lb/year / 2000 lb/ton = ***117 tons/yr***

When calculating emissions, make sure to include all possible sources of that air pollutant. For example, a coating operation calculating organic compound emissions should include all coatings and all clean up solvents used and you may also need to include VOCs from fuel combustion or other sources where VOCs are created in the process. The information needed for these calculations can be obtained from invoices, material safety data sheets (MSDS), and other information readily available from your suppliers. The USEPA has a resource of emission factors for specific processes. You can find this at:

http://www.epa.gov/ttn/chief/ap42/index.html

If you determine through these calculations that your business does not need a construction permit, you should maintain sufficient records to support your determination, in case you are ever questioned. Also, you can request a letter of exemption from the DNR, if you want to keep

this on file. (DNR will issue an exemption letter only after the review of a complete application.)

In the example above, the source exceeds the 5.7 pounds/hour VOC exemption and would need to apply for a construction permit.

A Construction Permit Application

Contact the DNR or SBCAAP to get the application packet containing the **Expanding Industry in Wisconsin** instructions and the air pollution construction permit forms.

DNR offices and phone numbers are listed on the back of this sheet. If you have questions about how to complete the forms you can contact DNR or the Small Business Clean Air Assistance Program (SBCAAP) to help arrange a pre-application meeting. Once you have completed the application, two copies should be submitted to the DNR's Central Office in Madison.

If your facility is located in Kenosha, Racine, Milwaukee, Waukesha, Washington, or Ozaukee Counties you may have to meet more stringent requirements in the construction permit.

What Will the Application Cost?

You must enclose a check for $1,350.00, payable to the Department of Natural Resources, when you submit the application. Other costs associated with the construction permit review process will vary depending on which air requirements apply to your proposed project. Some additional costs include:

- ❖ $2300 minor source review;
- ❖ $12,000 major source review;
- ❖ $4,000 or $8,000 for minor or major modifications (respectively);
- ❖ $1,350 for a stack test of single pollutant, and $950 for each additional pollutant up to 3 (may not be required);
- ❖ $700 air quality analysis for minor source;
- ❖ $2650 fee for expedited review of a minor source. (This speeds up the review of your application.)

The application fee will be returned by DNR if the project does not need a construction permit and you may begin construction immediately. But, if one is required you must wait until a permit is issued by DNR to begin construction and the application fee will be applied towards your final permit review fee. There is always a possibility that DNR will deny your permit, if you cannot meet all the requirements that apply, so you would be in trouble if you've done anything to start construction before receiving a permit.

What Are the Permit Review Steps?

First the DNR reviews the complete construction permit application, which can take from 20 to 60 days **<u>or more</u>** depending on the size of the project and how many permits are being reviewed by DNR at the time you submit the application. Once the review is complete, DNR will prepare a preliminary decision on whether to approve or deny the permit, and publishes a notice in your local paper. The notice tells the public they have 30 days from the date that paper was published to comment on the proposed project.

If the public shows significant interest in the proposed project or someone specifically requests one, the DNR will schedule a public hearing within 60 days after the end of the public comment period. Then DNR will issue or deny the construction permit within 60 days after the close of the public hearing. Note that this means a public hearing could add up to 120 days to the process.

If there is minimal interest during public comment, DNR can issue the permit soon after the 30 days is up. Once issued, the construction permit is effective for 18 months and one 18-month extension may be allowed upon request.

Now That I Have My <u>Draft</u> Permit?

As soon as you receive your draft permit from the DNR permit writer, **<u>read it through carefully!</u>** Pay attention to the specific requirements in the permit. There may be certain criteria you have to meet during construction of your process or related equipment or structures. The draft permit (during public comment) is the stage when it is easiest to negotiate if you feel certain

permit requirements will be difficult to meet. Some issues to watch for:

❏ Any new or existing process may be required to perform a stack test to demonstrate the emissions in the exhaust meet the limits in the regulations. Duct work and exhaust stacks may need to have test ports installed to allow testing equipment to be placed in the exhaust stream. See the **Stack Testing** fact sheet from SBCAAP for details.

❏ Control devices as well as the equipment designed to capture emissions from your process and carry them to the control device or exhaust point may have to meet certain criteria. These devices may also have requirements for installation of equipment to monitor operating parameters. Consider how these may affect the design of the process.

❏ Certain requirements may dictate the type of raw materials you can use in your process. For example: painting, coating or printing operations may be limited on the VOC content of the coatings or inks applied or the amount used each month. Consider how this will affect your operations and make sure you can live with the limits.

Once You Have a Final Permit?

DO NOT just file this away as your ticket to construct and operate. The final permit outlines all the conditions you will be required to meet during the term of the permit. As with your draft permit, pay attention to all the little details. Then make sure you have a system in place that will help you show DNR, or anyone else who asks, that you are meeting each condition in your permit.

If you're not sure how to get started, use the **Air Permit Compliance Calendar** (available from SBCAAP). It has sections to help you track monthly records. There are different reminders in pertinent months and there are blanks on each month's page for you to add your own reminders of specific deadlines included in your permit.

It is very important to keep track of the deadlines in a construction permit because of its limited life of 18 months. If you cannot meet certain deadlines you should talk with your DNR compliance inspectors about extensions. Also, if you cannot complete construction and/or required emissions testing in the construction permit, you should request your one 18-month extension to the permit well in advance of the expiration date of the permit.

Contacts for More Information or Assistance.

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.

For further information on the construction permit process contact your DNR Regional or Service Center office shown on the **DNR Contacts** fact sheet or the DNR's Central office at 608/266-6876.